



OIPE

RAW SEQUENCE LISTING

DATE: 10/02/2002

PATENT APPLICATION: US/10/083,641A

TIME: 15:26:57

Input Set : A:\Seq Listing #2.txt

Output Set: N:\CRF4\10022002\J083641A.raw

p.6

ENTERED

3 <110> APPLICANT: HAYSTEAD, TIMOTHY A
 5 <120> TITLE OF INVENTION: SMOOTH MUSCLE MYOSIN PHOSPHATASE ASSOCIATED KINASE
 7 <130> FILE REFERENCE: 1579-647
 9 <140> CURRENT APPLICATION NUMBER: 10/083,641A
 10 <141> CURRENT FILING DATE: 2002-02-27
 12 <150> PRIOR APPLICATION NUMBER: 60/271,436
 13 <151> PRIOR FILING DATE: 2001-02-27
 15 <160> NUMBER OF SEQ ID NOS: 17
 17 <170> SOFTWARE: PatentIn Ver. 2.1
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 15
 21 <212> TYPE: PRT
 22 <213> ORGANISM: Artificial Sequence
 24 <220> FEATURE:
 25 <223> OTHER INFORMATION: Description of Artificial Sequence: Endogenous kinase
 26 copurifies with SMPP-1M
 28 <400> SEQUENCE: 1
 29 Lys Lys Lys Arg Gln Ser Arg Arg Ser Thr Gln Gly Val Thr Leu
 30 1 5 10 15
 33 <210> SEQ ID NO: 2
 34 <211> LENGTH: 13
 35 <212> TYPE: PRT
 36 <213> ORGANISM: Artificial Sequence
 38 <220> FEATURE:
 39 <223> OTHER INFORMATION: Description of Artificial Sequence: human pDAPK3
 41 <400> SEQUENCE: 2
 42 Met Gly Glu Glu Leu Gly Ser Gly Gln Phe Ala Ile Val
 43 1 5 10
 46 <210> SEQ ID NO: 3
 47 <211> LENGTH: 320
 48 <212> TYPE: PRT
 49 <213> ORGANISM: Artificial Sequence
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: Description of Artificial Sequence: ZIP Kinase
 54 <400> SEQUENCE: 3
 55 Met Ser Thr Phe Arg Gln Glu Asp Val Glu Asp His Tyr Glu Met Gly
 56 1 5 10 15
 58 Glu Glu Leu Gly Ser Gly Gln Phe Ala Ile Val Arg Lys Cys Arg Gln
 59 20 25 30
 61 Lys Gly Thr Gly Lys Glu Tyr Ala Ala Lys Phe Ile Lys Lys Arg Arg
 62 35 40 45
 64 Leu Pro Ser Ser Arg Arg Gly Val Ser Arg Glu Glu Ile Glu Arg Glu
 65 50 55 60

RAW SEQUENCE LISTING

DATE: 10/02/2002

PATENT APPLICATION: US/10/083,641A

TIME: 15:26:57

Input Set : A:\Seq Listing #2.txt

Output Set: N:\CRF4\10022002\J083641A.raw

```

67 Val Asn Ile Leu Arg Glu Ile Arg His Pro Asn Ile Ile Thr Leu His
68 65                      70                      75                      80
70 Asp Ile Phe Glu Asn Lys Thr Asp Val Val Leu Ile Leu Glu Leu Val
71                      85                      90                      95
73 Ser Gly Gly Glu Leu Phe Asp Phe Leu Ala Glu Lys Glu Ser Leu Thr
74                      100                     105                     110
76 Glu Asp Glu Ala Thr Gln Phe Leu Lys Gln Ile Leu Asp Gly Val His
77                      115                     120                     125
79 Tyr Leu His Ser Lys Arg Ile Ala His Phe Asp Leu Lys Pro Glu Asn
80                      130                     135                     140
82 Ile Met Leu Leu Asp Lys Asn Val Pro Asn Pro Arg Ile Lys Leu Ile
83 145                      150                      155                      160
85 Asp Phe Gly Ile Ala His Lys Ile Glu Ala Gly Asn Glu Phe Lys Asn
86                      165                      170                      175
88 Ile Phe Gly Thr Pro Glu Phe Val Ala Pro Glu Ile Val Asn Tyr Glu
89                      180                      185                      190
91 Pro Leu Gly Leu Glu Ala Asp Met Trp Ser Ile Gly Val Ile Thr Tyr
92                      195                     200                     205
94 Ile Leu Leu Ser Gly Ala Ser Pro Phe Leu Gly Glu Thr Lys Gln Glu
95                      210                     215                     220
97 Thr Leu Thr Asn Ile Ser Ala Val Asn Tyr Asp Phe Asp Glu Glu Tyr
98 225                      230                      235                      240
100 Phe Ser Ser Thr Ser Glu Leu Ala Lys Asp Phe Ile Arg Arg Leu Leu
101                      245                      250                      255
103 Val Lys Asp Pro Lys Arg Arg Met Thr Ile Ala Gln Ser Leu Glu His
104                      260                      265                      270
106 Ser Trp Ile Lys Val Arg Arg Arg Glu Asp Gly Ala Arg Lys Pro Glu
107                      275                      280                      285
109 Arg Arg Arg Leu Arg Ala Ala Arg Leu Arg Glu Tyr Ser Leu Lys Ser
110                      290                      295                      300
112 His Ser Ser Met Pro Arg Asn Thr Ser Tyr Ala Ser Phe Glu Arg Phe
113 305                      310                      315                      320
119 <210> SEQ ID NO: 4
120 <211> LENGTH: 13
121 <212> TYPE: PRT
122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: Description of Artificial Sequence: rat DAP-like kinase
127 <220> FEATURE:
128 <221> NAME/KEY: Unsure
129 <222> LOCATION: (6), (9)
130 <223> OTHER INFORMATION: Xaa can be any amino acid
132 <400> SEQUENCE: 4
W--> 133 Met Leu Leu Asp Lys Xaa Ile Phe Xaa Arg Pro Ile Gln
134 1                      5                      10
137 <210> SEQ ID NO: 5
138 <211> LENGTH: 13
139 <212> TYPE: PRT
140 <213> ORGANISM: Artificial Sequence

```

RAW SEQUENCE LISTING

DATE: 10/02/2002

PATENT APPLICATION: US/10/083,641A

TIME: 15:26:57

Input Set : A:\Seq Listing #2.txt

Output Set: N:\CRF4\10022002\J083641A.raw

```

142 <220> FEATURE:
143 <223> OTHER INFORMATION: Description of Artificial Sequence: D-glycerate
dehydrogenase
145 <220> FEATURE:
146 <221> NAME/KEY: Unsure
147 <222> LOCATION: (8), (10), (11) and (13)
148 <223> OTHER INFORMATION: Xaa can be any amino acid
150 <400> SEQUENCE: 5
W--> 151 Met Thr Ile Ala Gln Asn Leu Xaa Tyr Xaa Xaa Ile Xaa
152 1 5 10
155 <210> SEQ ID NO: 6
156 <211> LENGTH: 1093
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Description of Artificial Sequence: Putative nucleotide
162 sequence of smooth muscle MYPT-Kinase
164 <220> FEATURE:
165 <221> NAME/KEY: Unsure
166 <222> LOCATION: (2), (7), (37), (39), (1056), (1081) and (1092)
167 <223> OTHER INFORMATION: N can be A, C, G or T
169 <400> SEQUENCE: 6
W--> 170 gntatgnata tcggtttaat cggccggagc tcgcccncng ggcagctgga ctccctctca 60
171 gacctccttc tttctcgccc tcagcacggg attaacctca cttgactgtt cttgggtccc 120
172 cgggtgccggg ccagcgctct ctccctcaag gcaatcccca agtgtctgtc atgaggctct 180
173 ttgggcagtt ctgttggtgt gggaaacctg ggaacagatg cacagaggct ggggtacaga 240
174 gtctctgctt cctctgggtc tgcagcgctt agctgttctt tccccacag cggccagttc 300
175 gccatcgtgc gcaagtgccg gcagaaggcg accggcatgg agtacgcggc caagttcata 360
176 aagaagcggc gcctgccgtc cagccggcgc ggtgtgagcc gtgaggagat cgagcgcgag 420
177 gtgagcatcc tgcgcgagat ccgccacccc aacatcatca cgtgcacga tgtgttcgag 480
178 aacaagacag atgtggtgct gatcttgag ctggtgtccg gcggcgaaact tttcgacttt 540
179 ctggctgaga aggatcactg acagaggatg aggccacgca gttcctcaag cagatcctgg 600
180 acggtgtcca ctacctgcac tccaagcgca tcgcgcactt tgacctgaag ccggagaaca 660
181 tcatgttgct ggacaagcat gcagccagcc cagcattaa gctcatcgac ttgggcatcg 720
182 cgcacaggat cgaggccggg agcgagttca agaacatctt tggcacgcca gaggctcgcg 780
183 gtgaggggca ggtgtgggca ccaccgata gggtagattt tgcacggcct tggcctgacc 840
184 tgcctcaaca atcctgtctt ccacagcccc tgagattgta aactatgaac cacttggtct 900
185 ggaagctgat atgtggagca tcggcgtcat cacctacatc ctgtgagtgc ctgagatggg 960
186 caggggcctc agactgtacc tgctagaggc ccagggatca gggctggcac ctctgcaaac 1020
W--> 187 tgcaaact ggggctgaga gatgtccctg ggaacnctgg atatgcctgg gccccaccaa 1080
W--> 188 ngtaggacca tnc 1093
191 <210> SEQ ID NO: 7
192 <211> LENGTH: 34
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino acid
sequence of rat
198 aorta smooth muscle MYPT-kinase
200 <220> FEATURE:
201 <221> NAME/KEY: Unsure

```

RAW SEQUENCE LISTING

DATE: 10/02/2002

PATENT APPLICATION: US/10/083,641A

TIME: 15:26:57

Input Set : A:\Seq Listing #2.txt

Output Set: N:\CRF4\10022002\J083641A.raw

202 <222> LOCATION: (1), (3) and (13)

203 <223> OTHER INFORMATION: Xaa can be any amino acid

205 <400> SEQUENCE: 7

W--> 206 Xaa Met Xaa Ile Gly Leu Ile Gly Arg Ser Ser Pro Xaa Gly Gln Leu

207 1 5 10 15

209 Asp Ser Leu Ser Asp Leu Leu Leu Ser Arg Pro Gln His Gly Ile Asn

210 20 25 30

212 Leu Thr

216 <210> SEQ ID NO: 8

217 <211> LENGTH: 22

218 <212> TYPE: PRT

219 <213> ORGANISM: Artificial Sequence

221 <220> FEATURE:

222 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino acid sequence of rat

223 aorta smooth muscle MYPT-kinase

225 <400> SEQUENCE: 8

226 Leu Phe Leu Gly Pro Arg Cys Arg Ala Ser Val Leu Ser Leu Lys Ala

227 1 5 10 15

229 Ile Pro Lys Cys Leu Ser

230 20

233 <210> SEQ ID NO: 9

234 <211> LENGTH: 125

235 <212> TYPE: PRT

236 <213> ORGANISM: Artificial Sequence

238 <220> FEATURE:

239 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino acid sequence of rat

240 aorta smooth muscle MYPT-kinase

242 <400> SEQUENCE: 9

243 Gly Ser Leu Gly Ser Ser Val Val Val Gly Asn Leu Gly Thr Asp Ala

244 1 5 10 15

246 Gln Arg Leu Gly Tyr Arg Val Leu Pro Ser Ser Gly Ser Ala Ala Leu

247 20 25 30

249 Ser Cys Ser Phe Pro His Ser Gly Phe Ala Ile Val Arg Lys Cys Lys

250 35 40 45

252 Gly Thr Gly Met Glu Tyr Ala Ala Lys Phe Ile Lys Lys Arg Arg Leu

253 50 55 60

255 Pro Ser Ser Arg Arg Gly Val Ser Arg Glu Glu Ile Glu Arg Glu Val

256 65 70 75 80

258 Ser Ile Leu Arg Glu Ile Arg His Pro Asn Ile Ile Thr Leu His Asp

259 85 90 95

261 Val Phe Glu Asn Lys Thr Asp Val Val Leu Ile Leu Glu Leu Val Ser

262 100 105 110

264 Gly Gly Glu Leu Phe Asp Phe Leu Ala Glu Lys Asp His

265 115 120 125

268 <210> SEQ ID NO: 10

269 <211> LENGTH: 28

270 <212> TYPE: PRT

271 <213> ORGANISM: Artificial Sequence

273 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 10/02/2002

PATENT APPLICATION: US/10/083,641A

TIME: 15:26:57

Input Set : A:\Seq Listing #2.txt

Output Set: N:\CRF4\10022002\J083641A.raw

```

274 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
275      acid sequence of rat aorta smooth muscle
276      MYPT-kinase
278 <400> SEQUENCE: 10
279 Gln Arg Met Arg Pro Arg Ser Ser Ser Arg Ser Trp Thr Val Ser
280  1          5          10          15
282 Thr Thr Cys Thr Pro Ser Ala Ser Arg Thr Leu Thr
283      20          25
286 <210> SEQ ID NO: 11
287 <211> LENGTH: 55
288 <212> TYPE: PRT
289 <213> ORGANISM: Artificial Sequence
291 <220> FEATURE:
292 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
293      acid sequence of rat aorta smooth muscle
294      MYPT-kinase
296 <400> SEQUENCE: 11
297 Ser Arg Arg Thr Ser Cys Cys Trp Thr Ser Met Gln Pro Ala His Ala
298  1          5          10          15
300 Leu Ser Ser Ser Thr Leu Ala Ser Arg Thr Gly Ser Arg Pro Val Ala
301      20          25          30
303 Ser Ser Arg Thr Ser Leu Ala Arg Gln Ser Ser Ser Val Arg Gly Arg
304      35          40          45
306 Cys Gly His His Pro Ile Gly
307      50          55
310 <210> SEQ ID NO: 12
311 <211> LENGTH: 18
312 <212> TYPE: PRT
313 <213> ORGANISM: Artificial Sequence
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
317      acid sequence of rat aorta smooth muscle
318      MYPT-kinase
320 <400> SEQUENCE: 12
321 Ile Leu His Gly Leu Thr Cys Leu Asn Asn Pro Val Phe His
322  1          5          10          15
324 Ser Pro
328 <210> SEQ ID NO: 13
329 <211> LENGTH: 4
330 <212> TYPE: PRT
331 <213> ORGANISM: Artificial Sequence
333 <220> FEATURE:
334 <223> OTHER INFORMATION: Description of Artificial Sequence: Deduced amino
335      acid sequence of rat aorta smooth muscle
336      MYPT-kinase
338 <400> SEQUENCE: 13
339 Asp Cys Lys Leu
340  1
343 <210> SEQ ID NO: 14

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/083,641A

DATE: 10/02/2002
TIME: 15:26:58

Input Set : A:\Seq Listing #2.txt
Output Set: N:\CRF4\10022002\J083641A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 6,9
Seq#:5; Xaa Pos. 8,10,11,13
Seq#:6; N Pos. 2,7,37,39,1056,1081,1092
Seq#:7; Xaa Pos. 1,3,13
Seq#:17; Xaa Pos. 15,18